In the Claims:

1. (Cancelled)

2. (Currently amended) A data representation of a physical resource operating in accordance with a protocol having a plurality of layers, the representation further comprising a timing layer representing synchronization trail information, the data representation being stored in a computer readable medium.

3-6. (Cancelled)

7. (Currently amended) ~~A method according to claim 1~~ In a communications network comprising a plurality of network elements, a method of providing management data describing synchronization trail information for said network elements, said method comprising:

obtaining network element synchronization data;
obtaining network element connectivity data; and
computing synchronization trail information for said network elements from said synchronization data and said connectivity data,

wherein computing the synchronization trail information comprises ~~the steps of~~:

selecting a network element as a start of a synchronization trail; and

following the synchronization trail to the synchronization source of the network element using said synchronization data and said connectivity data.

8. (Currently amended) ~~A method according to claim 1~~ In a communications network comprising a plurality of network elements, a method of providing management data describing synchronization trail information for said network elements, said method comprising:

obtaining network element synchronization data;

obtaining network element connectivity data; and

computing synchronization trail information for said network elements from said synchronization data and said connectivity data,

wherein computing the synchronization trail information comprises ~~the steps of~~ preferentially selecting leafNode network elements of the network as a start of a synchronization trail.

9. (Currently amended) A method according to claim [[1]] 8 wherein computing the synchronization trail information comprises ~~the steps of:~~

~~preferentially selecting leafNode network elements of the Network as or start of a synchronization trail;~~

following the synchronization trail to the synchronization source of the selected network element using said synchronization data and said connectivity data;

tagging all the network elements involved in synchronization trails as they are followed; and

discarding tagged network elements as the start of subsequent synchronization trails.

10. (Currently amended) ~~A method according to claim 1~~ In a communications network comprising a plurality of network elements, a method of providing management data describing synchronization trail information for said network elements, said method comprising:

obtaining network element synchronization data;

obtaining network element connectivity data; and

computing synchronization trail information for said network elements from said synchronization data and said connectivity data,

wherein computing the synchronization trail information comprises the steps of:

counting the number of hops from a network element at the start of synchronization trail to a primary reference clock.

11-13. (Cancelled)